

Flood stage and crest data are given in the following table:

[All dates in November except as otherwise specified]

River and station	Flood stage	Above flood stages— dates		Crest	
		From—	To—	Stage	Date
ATLANTIC DRAINAGE					
James: Columbia, Va.....	Feet 18	20	20	20.7	20
Tar:					
Tarboro, N. C.....	18	9	9	18.1	
Greenville, N. C.....	14	{ (1) 9	11	18.8	Oct. 29
Neuse: Smithfield, N. C.....	14	5	8	14.5	10
Cape Fear: Elizabethtown, N. C.....	22	6	7	17.0	6
Peedee: Mars Bluff, S. C.....	17	{ 8	{ 10	24.1	6
		30	(2)	17.9	9
				17.0	30
Santee:					
Rimini, S. C.....	12	{ (1) 7	{ 5	31.8	Oct. 6
Ferguson, S. C.....	12	(1)	(2)	14.0	9, 10
Saluda:				21.0	Oct. 7
Pelzer, S. C.....	7	18	18	7.0	18
Chappells, S. C.....	14	19	20	14.8	20
EAST GULF DRAINAGE					
Conecuh: Brewton, Ala.....	13	17	26	16.3	22
Alabama:					
Montgomery, Ala.....	35	15	25	47.9	19
Selma, Ala.....	35	15	28	50.7	20, 21
Coosa:					
Gadsden, Ala.....	22	15	25	26.0	18, 19
Lock No. 4, Lincoln, Ala.....	17	14	26	22.6	16
Wetumpka, Ala.....	45	17	20	43.7	18
Etowah: Canton, Ga.....	11	15	15	11.1	15
Oostanaula: Resaca, Ga.....	25	16	20	28.5	17, 18
Cahaba: Centerville, Ala.....	25	12	17	35.0	15
Tombigbee: Lock No. 4, Demopolis, Ala.....	39	14	(2)	63.7	21, 22
Black Warrior: Lock No. 10, Tuscaloosa, Ala.....	46	12	20	65.1	15
Chickasawhay:					
Enterprise, Miss.....	21	15	17	25.0	16
Shubuta, Miss.....	27	17	21	31.7	19
Leaf: Hattiesburg, Miss.....	19	16	18	22.0	16
Pearl:					
Jackson, Miss.....	20	17	(2)	25.8	23-26
Monticello, Miss.....	18	14	18	20.4	14
Columbia, Miss.....	18	15	21	23.5	16
Bogue Chitto: Franklinton, La.....	16	15	16	17.3	16
West Pearl: Pearl River, La.....	13	{ 7	{ 13	15.2	7
		16	(2)	16.3	18
MISSISSIPPI DRAINAGE					
Monongahela: Lock No. 7, Greensboro, Pa.....	30	18	18	30.2	18
Ohio: Dam No. 25, near Point Pleasant, W. Va.....	40	20	20	40.0	20
Hocking: Athens, Ohio.....	17	19	19	17.25	19
Tennessee:					
Widows Bar Dam, Ala.....	26	16	21	—	—
Guntersville, Ala.....	31	18	19	31.0	18, 19
Florence, Ala.....	18	16	22	19.7	19
Riverton, Ala.....	33	16	24	39.0	20
Elk: Fayetteville, Tenn.....	14	{ 3	{ 3	15.0	3
		15	18	17.4	15
WEST GULF DRAINAGE					
Colorado: Columbus, Tex.....	28	9	9	30.0	9

<sup>1</sup> Continued from last month.

<sup>2</sup> Continued at end of month.

#### EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, NOVEMBER, 1929

By J. B. KINCER

*General summary.*—Early in the first decade weather conditions were generally unfavorable for outside operations in most places east of the Rocky Mountains and these detrimental conditions continued during the latter part in the South, although in the Southeast seasonal work made fairly good advance. Rain was needed in the Florida Peninsula, but there was a generally ample supply of soil moisture nearly everywhere east of the Rockies; west of the mountains droughty conditions continued. Cool weather brought frosts nearly to the southern part of the country, but with no material damage; there was some harm to livestock in the Northwest from the severe weather.

During the second decade frequent rains and muddy fields made conditions generally unfavorable for farm work in the central valleys and in much of the South,

but rain was still needed in the extreme Southeast, especially on the uplands of Florida. There was some damage to outstanding crops from overflowed lowlands in parts of the Southeast. In the northern area conditions were more favorable for outside operations, with the snow cover decreased and free ranging of livestock permitted. Droughty conditions continued west of the Rocky Mountains.

The unseasonably cold weather during the last decade, attended by frequent rains in the Southeast and snows in the northern portions of the country, caused a general suspension of outdoor work. Freezing weather extended well into the southern portions of the country in the Southwest, with some damage to tender truck in Texas. At the close of the month there was a general, fairly good snow cover in most of the northern half of the country, affording protection to winter grains and meadows. Droughty conditions still prevailed west of the Rocky Mountains, with snow deficient on desert ranges.

*Small grains.*—During the first decade winter wheat continued to make good advance in the main producing sections, with generally ample soil moisture; some western parts of the belt reported the best moisture conditions in many years. Snows in parts of the Northwest were especially favorable for winter grains, but in the Pacific Northwest the continued dry conditions were very detrimental, delaying seeding, plowing, and germination.

East of the Rockies, satisfactory condition of winter wheat continued throughout the second decade and the crop entered the winter in generally good shape; snow was needed in some parts of the Rocky Mountain region, while the continued dry weather in the Pacific Northwest was very detrimental. Although there was only a light snow cover over parts of the winter-wheat belt during the last decade, no apparent damage was reported from the severe weather, and at the close of the month a fairly good cover over most parts afforded protection; droughty conditions still prevailed over the Pacific Northwest.

*Corn and cotton.*—Husking and cribbing corn was delayed during the first decade by frequent precipitation and wet fields; there was some improvement during the second decade, but many places were still too wet. During the last decade the cold weather which overspread the Corn Belt was beneficial in drying out the crop locally, while the frozen ground aided hand husking, although in some parts the rough fields made machine husking difficult.

The wet, cloudy weather during the first decade made the gathering of the remaining cotton difficult, especially in the western belt, and there were complaints of stained and damaged staple. Frequent rains during the second decade were detrimental to cotton picking, although some progress was made in the northeastern belt. During the last decade considerable advance was noted in gathering the remaining crop in the northern portions of the belt, while the absence of rain in Texas made better conditions for scrapping.

*Miscellaneous crops.*—Meadows and ranges were largely in satisfactory condition in most places east of the Rocky Mountains during the month, with some snow cover during the severe weather. Snows were beneficial in parts of the Rockies, while some range remained open, permitting much grazing. The continued dry conditions in the more western States caused marked deterioration of the range.

Winter and fall truck crops did well during most of the month, although there were some reports of sweet potatoes rotting in the ground in the Southeast, due to continued wet weather. More or less frost damage to truck occurred toward the close of the month in the Southeast. Citrus continued to do well generally.